

NEWS RELEASE

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National Science Board Briefed by NSF on Steps to Create Transformative Research Initiative

Transformative Research Will Be a Core, Articulated NSF value

In response to guidance provided by the National Science Board (Board) in its recent report, *Enhancing Support of Transformative Research at the National Science Foundation* http://www.nsf.gov/nsb/documents/2007/tr_report.pdf, National Science Foundation (NSF) Director Arden L. Bement provided an initial overview of steps being taken by NSF to implement a transformative research initiative.

The Board report defined transformative research as “research that has the capacity to revolutionize existing fields, create new subfields, cause paradigm shifts, support discovery, and lead to radically new technologies...” and recommended that the NSF “...create an environment that is more open to and encourages transformative research proposals from the research community.” The overarching guidance provided by the Board was “that NSF develop a distinct, Foundation-wide Transformative Research Initiative (TRI) distinguishable by its potential impact on prevailing paradigms and by the potential to create new fields of science, to develop new technologies, and to open new frontiers.”

Bement described a three-pronged initial TRI strategy being employed by NSF that would:

1. Infuse support of potentially transformative research (PTR) throughout NSF and all of its programs;
2. Learn how to facilitate (PTR);
3. Lead the community through opportunities for PTR proposal submissions.

NSF plans to embark on a three-year trial, during which it will replace the SGER awards program with a two-tiered “early-concept” award mechanism. Tier I will call for limited funding grants that are internally reviewed. Tier II will entail larger grants requiring additional levels of review. Further, the NSF Director’s Office will lead a working group to recommend implementation details; a mechanism to monitor and track impact and lessons-learned; and a method to advertise the new approach to the community.

The Board applauded NSF’s initial efforts, and approved a change in NSF Merit Review Criteria I (in the intellectual merit section of the NSF Grant Proposal Guide) to specifically include review of the extent to which a proposal also suggests and explores

potentially transformative concepts. NSF will continue developing their TRI strategy and provide the Board with an update at their next meeting in October 2007.

The National Science Board was established by Congress in 1950, and has two important roles. It provides oversight for, and establishes the policies of, the National Science Foundation. It also serves as an independent body of advisors to both the President and Congress on broad national policy issues related to science and engineering research and education. For more information on recent actions of the National Science Board, please visit www.nsf.gov/nsb.

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